## The first fi

15

20

30

## what is claimed is:

1. Method for producing aluminium alloy strips containing (by weight) at least one of elements Fe (from 0.15 to 1.5%) or Mn (from 0.35 to 1.9%) with:

Fe + Mn < 2.5%, and optionally containing Si (<0.8%), Mg (<0.2%), Cu (<0.2%), Cr (<0.2%), Zn (<0.2%), other elements <0.1% each and 0.3% in all, by continuous twin-roll casting between cooled shrinked cylinders to a thickness of between 1 and 5 mm, optionally followed by cold rolling, the force applied to the rolls during casting, expressed in t per metre of strip width, being less than 300 + 2000/e, e being the thickness of the cast strip expressed in mm.

2. Method for producing aluminium alloy strips containing (by weight) at least one of elements Fe (from 0.15 to 1.5 %) or Mn (from 0.35 to 1.9 %) with Fe + Mn < 2.5 %, and optionally Si < 0.8 %, Mg < 0.2 %, Cu < 0.2 %, Cr < 0.2 %, Zn < 0.2 %, other elements < 0.1 % each and 0.3 % in all, by continuous twin-roll casting between cooled shrinked cylinders, characterised in that the heat exchange between the metal and the cylinder shells during casting is slowed down such that the temperature of the cylinder shells is higher than 80°C, preferably than 130°C.

25 3. Method in accordance with claim 2, characterised in that the cylinder shell material has poor thermal conductivity.

4. Method according to any of claims 1 to 3, characterised in that the arc of contact between the metal and the casting rolls is less than 60 mm, preferably less than 56 mm.

A

A

A

A

15

Aluminium alloy strip containing (by weight) at least one of elements Fe (from 0.15 to 1.5 %) or Mn (from 0.35 to 1.9 %) with Fe + Mn < 2.5 % and optionally containing Si (< 0.8 %), Mg (< 0.2 %), Cu (< 0.2 %) or Zn (< 0.2 %) other elements < 0.1 % each and 0.3 % in all, continuous cast to a thickness of between 1 and 5 mm, having at the as-cast state a product  $R_{0.2}$  (in MPa) x A (%) greater than 2500.

- 6. Strip according to claim 5 having a product 10  $R_{0.2}$  x A greater than 3000.
  - 7. Strip according to either of claims 5 or 6 having a yield strength  $R_{0.2}$  greater than 80 MPa.
  - 8. Strip according to claim 7 having a yield strength  $R_{0.2}$  > 100 MPa.
  - 9. Strip according to any of claims 5 to 8, having an elongation A > 20 %.
  - 10. Strip in Mn-free alloy according to claim 9 having an elongation A > 30 %.
- 11. Strip according to any of claims 5 to 10, 20 having an earing ratio of less than 7.
  - 12. Strip according to claim 11, having an earing ratio of lass than 5.
- 13. Strip according to any of claims 5 to 12, characterized in that the average size of the 25 intermetallic particles containing Fe, Mn and/or Si is no more than 0.4  $\mu m$ .
  - 14. Strip according to any of claims 5 to 13, characterized in that the size of at least 90 % of the intermetallic particles containing Fe, Mn and/or Si is
- 30 less than 1 µm,

A A 15 Strip in Al-Mn alloy according to any of claims 5 to T4 with Fe + Mn > 1.4 % having, after enamelling and/or PTFE anti-achesive coating treatment, a yield strength of more than 80 MPa, preferably more than 100 MPa.

-A

5

10

16. Strip cold rolled from a strip according to any of claims 5 to 15, characterized in that the k and n coefficients of the work hardening curve  $R_{0.2} = k \epsilon^n$ , in which  $\epsilon = (2/\sqrt{3}) \, l_e$  (initial thickness/final thickness) are such that k > 150 and n < 0.20.

17. Strip according to claim 16, characterized in that n < 0.15.

18. Enamel ed and/or PTFE anti-adhesive coated cooking utensil produced from strips according to any of claims 5 to 17.

19. Lacquered of varnished strip according to any of claims 5 to 17.

15

20